

# Delaware SREC Procurement: Administratively Determined Pricing in the Context of a Pilot Program

Presentation to the  
Subcommittee of the Renewable Energy Task Force

New Energy Opportunities, Inc.  
Consultant to the Delaware Public Service Commission  
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# Overview

- ◆ As part of a pilot program, a proposal for administratively determined prices for small solar PV projects (up to 500 kW) for 20-year SREC contracts has been developed on a negotiated basis by members of the subcommittee of the Renewable Energy Task Force
- ◆ If approved by the subcommittee, it will be proposed to the Task Force, which, if approved, will recommend it to the Public Service Commission (with respect to Delmarva Power's participation)
- ◆ The proposal raises a number of issues—addressed in this presentation:
  - Appropriateness of a long-term SREC contract procurement program
  - Appropriateness of procurement in tiers, administratively determined pricing and contract structure
  - Program design and SREC prices

# Subcommittee Proposal: Key Features

- ◆ Price—20-year term with 5:1+ frontloading
  - Tier 1: \$270 for 1<sup>st</sup> 10 years; \$50 for 2<sup>nd</sup> 10 years
  - Tier 2: \$250 for 1<sup>st</sup> 10 years; \$50 for 2<sup>nd</sup> 10 years
  - Sellers can get benefit of 2 10% SREC multipliers (DE manufacturing/installation)
- ◆ Delmarva Power SOS procurement by tiers (#s are estimated)
  - Tier 1: 2,972 SRECs (26%)
  - Tier 2: 4,000 SRECs (35%)
  - Tier 3: 4,500 SRECs (39%)—Competitively bid
  - Tier 4: 0 SRECs (0%)—Competitively bid (0 because of Dover Sun Park)
- ◆ Use of standard contracts
- ◆ Third party contemplated to manage SREC procurement and be the contracting party—the Sustainable Energy Utility

# Long-Term Contracts

- ◆ Strong industry practice supporting long-term contracts
- ◆ 20-year contracts within typical range of 10-25 years
- ◆ Consistent with legislative objectives:
  - Revenue assurance for developer/sellers
  - Cost minimization
    - Facilitation of financing should help supply keep in step with RPS demand
    - Longer term can provide for lower annual costs /amortization of renewable premium
    - May facilitate longer debt financing period for developers
  - Lower costs should minimize contribution to reaching of 1% SREC trigger as % of retail energy costs assuming contracts are properly structured
- ◆ Pilot should be designed w/ ongoing long-term contract program in mind
- ◆ Pilot administrative costs will be higher relative to future costs

# Proposed Program Design Has Some Unusual Features

- ◆ Delaware would be the first retail competition state with SRECs to set administratively-determined prices for SRECs
  - NJ: 10-15 year SREC contracts—competitive bidding
  - PA: competitive long-term SREC contracting process by utilities
- ◆ 20-year contracts with higher prices for first 10 years and sharply lower prices for next 10 years is unusual
- ◆ A number of states/municipalities that have used administratively determined prices have oversubscribed almost immediately—e.g., Vermont, Gainesville
  - Prices set too high
  - Solar PV has been a declining cost market and continuing cost decreases are expected
- ◆ Other states have used a step/declining price model (CA, CO) to better simulate (and stimulate) competition

# Commission Staff Perspective and Approach

- ◆ Procurement using competitive processes is generally the best approach
- ◆ Our recommendation—absent the subcommittee’s progress to date would have included:
  - A second “step” for Tier 1 at a lower price
  - Utilization of competitive bidding for Tier 2
  - Use of 15-20 year flat rate contracts for all tiers
- ◆ In light of the subcommittee’s progress to date, we have worked with the subcommittee in an advisory capacity to negotiate a reduction in administratively determined prices for both Tier 1 and Tier 2 from what had previously been proposed based on current knowledge :
  - \$270 rather than \$290 for the 1<sup>st</sup> 10 years of Tier1 (\$50 for the 2<sup>nd</sup> 10 years)
  - \$250 rather than \$270 for the 2<sup>nd</sup> 10 years of Tier 2 (\$50 for the 2<sup>nd</sup> 10 years)
  - Agreement is on pricing levels and not necessarily on underlying assumptions

## Perspective and Approach—Continued

- ◆ The Commission Staff reserves the right to set forth the pros and cons of using a competitive procurement process if and when a proposal is made by Delmarva Power to the Commission
- ◆ Going forward with imperfect knowledge or a less than optimal program is better than delay
  - Treasury grant in lieu of investment tax credit and bonus depreciation facilitate more projects at lower prices to ratepayers
  - These programs have end dates (2011/2012)

# Goals for a Pilot Program

- ◆ Assist in selection of ongoing procurement model(s):
  - Administratively determined prices
    - Single price
    - Stepped (prices decline when specified volume goals reached)
  - Competitively determined prices
    - Single bid/standard contracts
    - RFP/negotiated contracts—not beneficial for small projects: transaction costs
- ◆ Assist in selection of contract structures
- ◆ Assist in setting SREC prices for future administratively determined pricing, if any
- ◆ Assist with other program design features
- ◆ In light of administrative costs, pilot program should be designed to maximize long-term benefits

# Observations on Administratively Set Prices: Tiers 1 and 2

- ◆ There is a bell curve of project economics
  - This bell curve is likely wider than normal due to DE 10% credits and bonus depreciation—large variance
- ◆ Very difficult to ascertain appropriate pricing given many inputs, declining module costs, data availability, evolving state of the industry
- ◆ Relative to prices set by competition, proposed prices may be too high
  - Administratively set prices: attempt to set price for “average” project—winners are those who are first in line
  - Competitively set prices: generally, most efficient, attractive projects are successful—winners offer lower prices –usually, substantially better than average
  - Factors: installed cost, solar resource, cost of capital, ability to use tax benefits, etc.
- ◆ Justification for administratively set prices
  - Higher for Tier 1
  - Lower for Tier 2

## Observations on Subcommittee Proposal: Tiers 1 and 2—Continued

- ◆ Use of tiers is supported by legislative language (Senate Substitute 1 for Senate Bill 119) re ensuring solar PV of various sizes are financially viable and cost effective (one of many factors to consider)
- ◆ Best practice for administratively set prices is step/declining price model
  - Better at simulating competition—track record for results at lower cost (CA, CO)
  - Mitigates risk of immediate oversubscription (as occurred in VT, Gainesville)
  - More difficult to employ in pilot program (small size); should be strongly considered if administratively set pricing is to be used on an ongoing basis
- ◆ Use of flat pricing for a 15-20 year term is more consistent with industry practice, would result in lower pricing in early years, and would put less pressure on reaching the 1% cost trigger over the next few years (relative to proposed pricing approach with higher price in 1<sup>st</sup> 10 years and lower pricing in 2<sup>nd</sup> 10-year period)

# What to Do?

- ◆ Without being overly complex, pilot program can use administratively determined pricing for Tier 1 and Tier 2
- ◆ Consideration should be given to applicants being contractually required to provide information that will assist decision makers in the future in evaluating and setting prices (not required for competitive bidding)
  - Capital and operating costs
  - Financing structure/operational performance
- ◆ Declining price contract structure should be reevaluated re future use
- ◆ Implementation of pilot: important to get the details right
  - Procurement administration
  - Who are the contracting parties?